

Barrow Service Unit

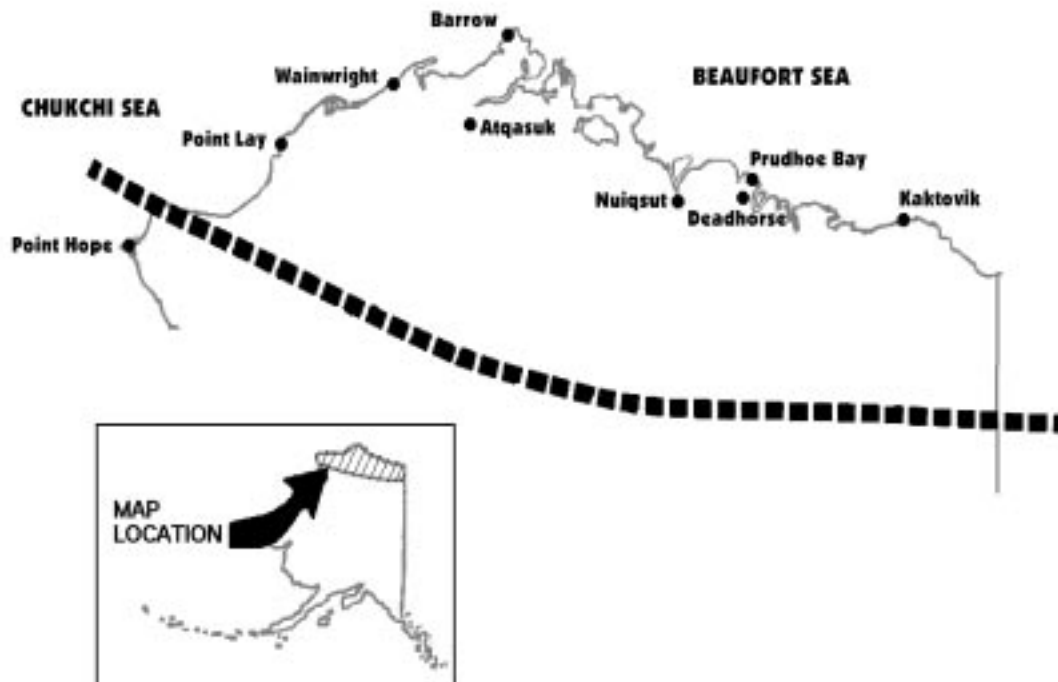
OVERVIEW

Alaska Native 1998 User Population.

BARROW SERVICE UNIT	5,023
Arctic Slope Native Association	5,023

Users are defined as beneficiaries who used a facility that reports through the IHS data system at least once between 10/1/95 and 9/30/98.

Environmental Factors. The Barrow Service Unit is the most northerly of the nine service units. Bordering on the north is the Arctic Ocean, on the west is the Chukchi Sea, and on the northeast is the Beaufort Sea. The total area of the service unit is 95,366 square miles.



The entire land area is underlain by continuous permafrost extending from a few inches below the land surface to depths ranging from 600 to 2,000 feet (190-600 m). Ice-wedge polygons, a common permafrost surface feature, lie throughout the coastal plain section.

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Temperature extremes are 70 degrees F° above zero to minus 55 (with windchill factors below -100 degrees). Averages are 45 for summer and -30 in the winter. For 56 days during the winter, the sun does not come above the horizon. For 82 days in the summer, the sun does not set.

Barrow is the largest city of the area. It is 330 miles above the Arctic Circle, 1,955 miles north of Seattle, 722 miles northwest of Anchorage, and 502 miles northwest of Fairbanks. Point Barrow, the northernmost point of the United States on the Arctic Plain, is 10 miles northeast of Barrow. Located within the U.S. Naval Petroleum Reserve #4 (PET 4), Barrow is the seat of government for the North Slope Borough.

Utilities. Utilities in Barrow include electricity and natural gas. A water and sewage system is available to an increasing number of homes. Electricity and water are available in the seven villages.

Communications. The North Slope Borough has been approved for Universal Services Fund (USF) grant to expand their network to 56K relay service in six villages, and upgrade their frame relay between the Samuel Simmonds Memorial Hospital and ANMC to a T1 service. Outside the town of Barrow, there are long distance toll charges for Internet access. There is equal access for long distance phone service in this region, and it is estimated that most of the residents of Barrow and North Slope villages have telephones in their homes.

Transportation. Transportation throughout the service unit is entirely by airplane. There are daily flights among Anchorage, Fairbanks, and Barrow. By air, Barrow is 2 hours 45 minutes from Anchorage, 4 hours 30 minutes from Juneau and 5 hours 40 minutes from Seattle. The villages have daily or weekly flight service scheduled to Barrow, weather permitting. Charter aircraft also provide transportation to villages.

Within the villages other modes of transportation are available. No roads run between any of the communities, although there are bus systems and taxis in Barrow. For about six weeks during August and September, ships can usually reach the coastal villages. During the rest of the year, a solid icepack prevents sea travel. Finally, residents use the snowmachine to journey between villages during the long winter months.

Housing. A limited number of furnished Public Health Service apartments are available with one, two and three-bedroom units in Barrow. Visiting personnel can stay in transient quarters or several local hotels. Limited housing exists for non-government employees in Barrow and the villages.

Education. Schools in Barrow and the villages provide education from pre-kindergarten through senior high levels. Also, college course work and programs are offered through Arctic Sivunmun Ilisagvik College in Barrow.

Natural Resources. Although isolated by distance and climate from the rest of the state of Alaska, Barrow has achieved prominence. Barrow is the regional center for business,

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communications, government and transportation for the North Slope area. The predominant natural resources are whaling, fishing, game and oil. Supporting the area economy are defense installations and their contractors, the DEW Line (Distant Early Warning System), petroleum and natural gas, the Weather Bureau, the Coast Guard, the Arctic Slope Regional Corporation and headquarters of the North Slope Borough.

Employment. The May 1999 edition of the Alaska Department of Labor, *Alaska Economic Trends*, reports the North Slope Borough unemployment rate at 6.3% and the Northwest Arctic Borough at 12.6%.

Tribes.

North Slope Borough Region

Native Village of Atkasuk – P.O. Box 108, Atkasuk, AK 99791

Native Village of Barrow - P.O. Box 1139, Barrow, AK 99723

Inupiat Community of the Arctic Slope IRA - P.O. Box 934, Barrow, AK 99723

Native Village of Kaktovik - P.O. Box 75, Kaktovik, AK 99747

Nuiqsut Tribal Council – P.O. Box 109, Nuiqsut, AK 99789

Point Lay Tribal Council IRA - P.O. Box 109, Point Lay, AK 99759

Wainwright Traditional Council - P.O. Box 143, Wainwright, AK 99782

DESCRIPTION OF HEALTH-CARE DELIVERY SYSTEM

The Barrow Service Unit provides medical, eye care and dental care to Alaska Natives residing in Barrow and five villages. Point Hope and Anaktuvuk Pass, which are geographically located in the North Slope Borough, receive some medical care from the service units of Kotzebue and Interior Alaska, respectively. The community health aide programs in those villages are provided by the North Slope Borough.

In October 1990, Ukpeagvik Inupiat Corporation—Construction (UICC) assumed the management of the following Departments under a P.L. 93-638 contract: housekeeping, laundry, maintenance, supply, dietary, and security. The Arctic Slope Native Association assumed management of the hospital-based services provided by IHS and the Borough, through a 93-638 contract in March 1996. The Community Health Aide Program and the village clinics are managed by the North Slope Borough.

Name and location of Hospitals/Clinics.

Samuel Simmonds Memorial Hospital, 1296 Agvik Street, Barrow, Alaska 99723

Under new management by the Arctic Slope Native Association (ASNA), the Barrow Hospital name changed to the Samuel Simmonds Memorial Hospital and the Vera Oleumaun Outpatient Clinic.

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The Samuel Simmonds Hospital serves as headquarters of health delivery to the region and to itinerant professional medical teams. This Hospital is a 14-bed general medical facility accredited by the Joint Commission on Accreditation of Healthcare Organizations. The single-story woodframe structure, erected on wood pilings in 1964, has 21,405 square feet.

Services provided are outpatient clinic, emergency room, general inpatient services, health screening and prenatal and well-baby care. Personnel from the Alaska Native Medical Center (ANMC) in Anchorage provide specialty clinics. Dental services are available at the Greist Family Services Building through ASNA under P.L. 93-638 funding. The Arctic Slope Native Association and Ukpeagvik Inupiat Corporation (UIC) under contract share hospital programs.

Community Health Aides (CHAs). In addition to the Hospital, the service unit has five village-built clinics staffed by CHAs. The North Slope Borough Health and Social Services Agency employs the health aides and administers the CHA program in the following clinics:

Anaktuvuk Pass
Atkasuk

Kaktovik
Nuiqsut

Point Hope
Point Lay

Wainwright

NON-TRIBAL HEALTH AGENCIES AND FACILITIES AND TYPES OF SERVICES PROVIDED TO SERVICE POPULATION

The North Slope Borough Department of Health and Social Services Agency serves the area within the boundaries of the North Slope Region. The agency is unique in that it combines its services with the State of Alaska's health system. The goal of the agency is to unite all health resources into one program to provide a comprehensive health delivery system to the region. To-date, the agency has made significant strides and is now recognized as a grantee of the Public Health Service.

The agency offers direct services and programs to borough residents and the State of Alaska. Some of the services and programs are: community health aides, emergency medical services, public health nursing, public assistance, mental health, alcohol and drug abuse, arctic women in crisis, parent-infant program, infant learning program, senior citizens program, children's receiving home, the Women Infant and Children (WIC) program, alternate programs for youth, environmental health and community health education and medical development.

The North Slope Borough Department of Health and Social Services operates the Telehealth Network to provide medical care through telecommunications. Telehealth uses desktop video telephones to link seven remote village clinics with the Samuel Simmonds Hospital, the Alaska Native Medical Center in Anchorage and the Maniilaq Health Center in Kotzebue.

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The State of Alaska also provides services to residents of the region. State-funded social workers and one juvenile probation officer live in Barrow and travel to all communities of the North Slope Borough (except for Point Hope) for village services.

HEALTH SERVICES AND FACILITIES PLANNING ISSUES

The Samuel Simmonds Memorial Hospital is in need of replacement. Another major priority is to add a new wing to the current North Slope Borough Senior Residential Center, an extended care unit for the elderly who cannot live independently.

The inpatient area of the hospital is not large enough to accommodate the present inpatient workload, the design is outdated and needs improvement. Currently, there is only one small room designated as an acute care pediatric room. At times three or more children are admitted that require cribs, an adult patient room is rearranged to provide space for the pediatric patients. One larger room or pediatric ward designed to meet the special needs of children is an immediate requirement for more efficient inpatient services.

The inpatient rooms presently do not provide the safest environment for suicidal and psychiatric patients. A specially-designed room specifically set up to provide a safe environment would assist with the proper care of such patients.

The Samuel Simmonds Memorial Hospital needs to be replaced with a facility that provides an enlarged outpatient area, increased office space, and a newly designed inpatient area. During the interim period, an addition to the current facility to provide two more outpatient rooms to the Vera Olemaun Outpatient clinic and four offices would assist with the efficient provision of patient care. A new hospital has been approved by the IHS and is on the IHS Health Facility Construction Priority List.

One of the major concerns of the residents of the North Slope Borough and its leaders has been to have an extended care unit for the elderly in Barrow. The North Slope Borough built an independent elderly residential center. The center cannot provide care for the elders that need skilled nursing services or that are unable to live independently. The elders of the North Slope Borough requiring special care are being placed in facilities in Fairbanks or Anchorage. This practice of sending the elderly requiring special care out of Barrow creates a situation in which elders are isolated from their family members, their native language and traditional foods. A newly constructed wing to the current North Slope Borough Senior Residential Center is a major priority so that the elders can live their last days with respect in their own homeland.

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HEALTH STATUS OF ALASKA NATIVES LIVING IN THE BARROW SERVICE UNIT

Mortality.

The following table shows Native deaths by age and the leading causes of crude death rates for the Barrow Service Unit.

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Alaska Native Deaths by Age and
Three-Year Average Crude Death Rates per 100,000 Population

	1995	1996	1997	3 -Year Rate
Total Deaths	16	21	35	590.4
Age at Death:				
under 5	0	1	1	
5-9	1	0	2	
10-14	0	0	2	
15-24	1	1	4	
25-44	4	3	8	
45-64	2	7	6	
64+	7	9	12	
Age Unknown	1	0	0	

Infant Mortality.

The following graph shows the 1997 infant mortality rate decreased for Barrow Natives and the U.S. rate remaining the same.

Leading Causes of Death	1993-1995 AI/AN	1993-1995 U.S.	1994-1996 AI/AN	1994-1996 U.S.	1995-1997 AI/AN	1995-1997 U.S.
1) Unintentional Injuries (Accidents) /1	128.2	35.5	100.4	35.8	139.4	35.7
Water Transport/Drowning	34.2	1.7	33.5	1.6	16.4	29.6
Motor Vehicles	51.3	16.5	16.7	16.5	16.4	16.2
2) Malignant Neoplasms /2	128.2	204.9	142.2	203.4	123	201.6
Lung Cancer	59.8	57.5	58.6	57.3	41.0	59.2
3) Heart Disease	119.7	280.7	92.0	276.4	98.4	271.6
4) Suicide	17.1	11.9	25.1	11.6	49.2	11.4
5) Alcohol Related /3	17.1	7.7	25.1	7.5	32.8	7.3
6) Homicide	34.2	8.7	25.1	7.9	32.8	7.4
7) Chronic Obst. Pul. Diseases	34.2	39.2	33.5	40	24.6	40.7

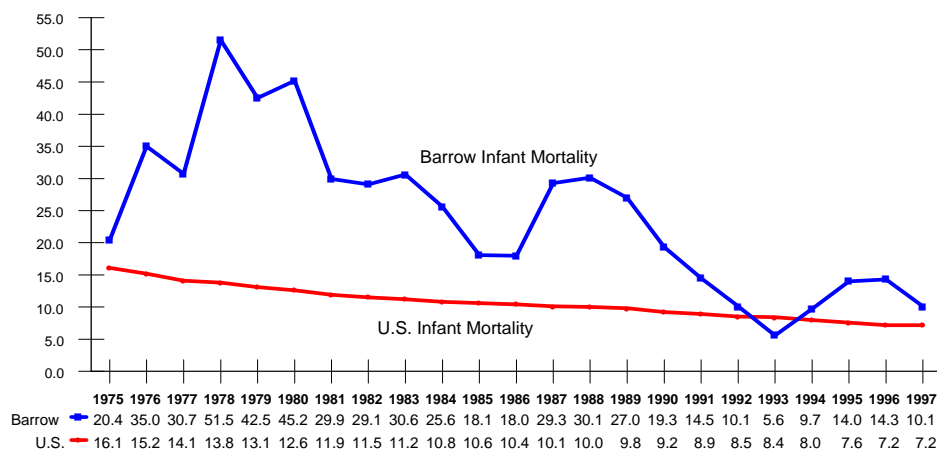
1/ Does not include injuries purposefully inflicted or injuries undetermined whether purposefully or accidentally inflicted. Motor Vehicle and Water Transport/Drowning are also counted in the total Accidents; it does not include alcohol related deaths.

2/ Lung Cancer is included in Malignant Neoplasms.

3/ Alcohol Related deaths include alcoholic psychoses, alcohol dependence syndrome, alcohol abuse, alcoholic liver disease and cirrhosis, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, excessive blood level of alcohol, and accidental poisoning by alcoholic beverages and ethyl alcohol.

4/ Causes not included when deaths average less than one per year in 1995-97. Single year rates for U.S. Alaska Area Native Health Service, Division of Planning, Evaluation & Health Statistics.

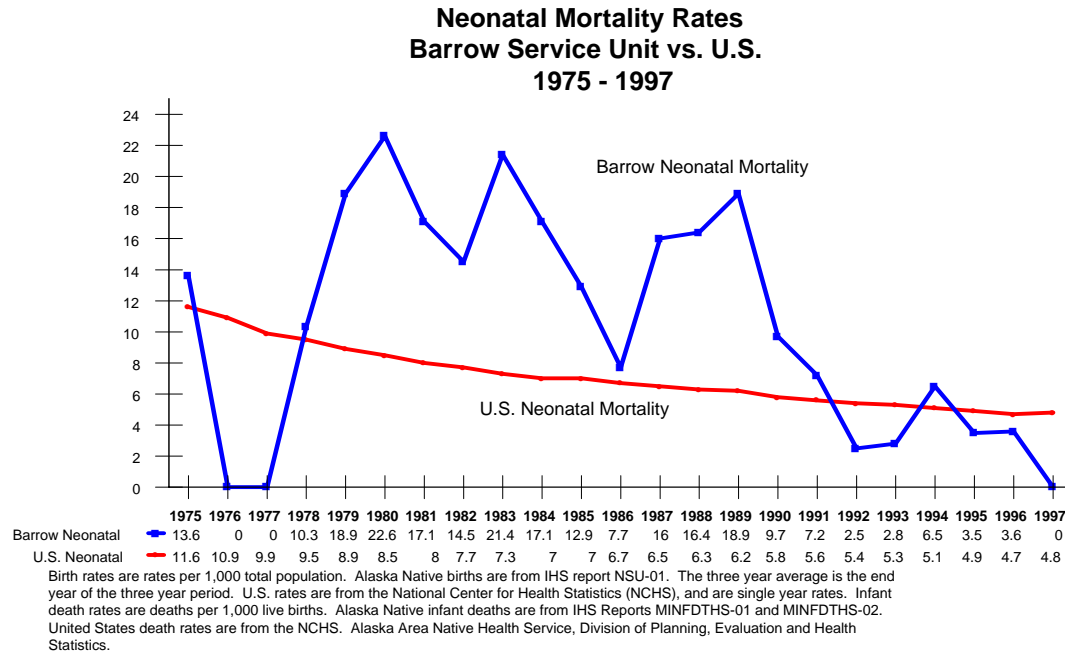
Infant Mortality Rates
Barrow Service Unit vs. U.S.
1975 - 1997



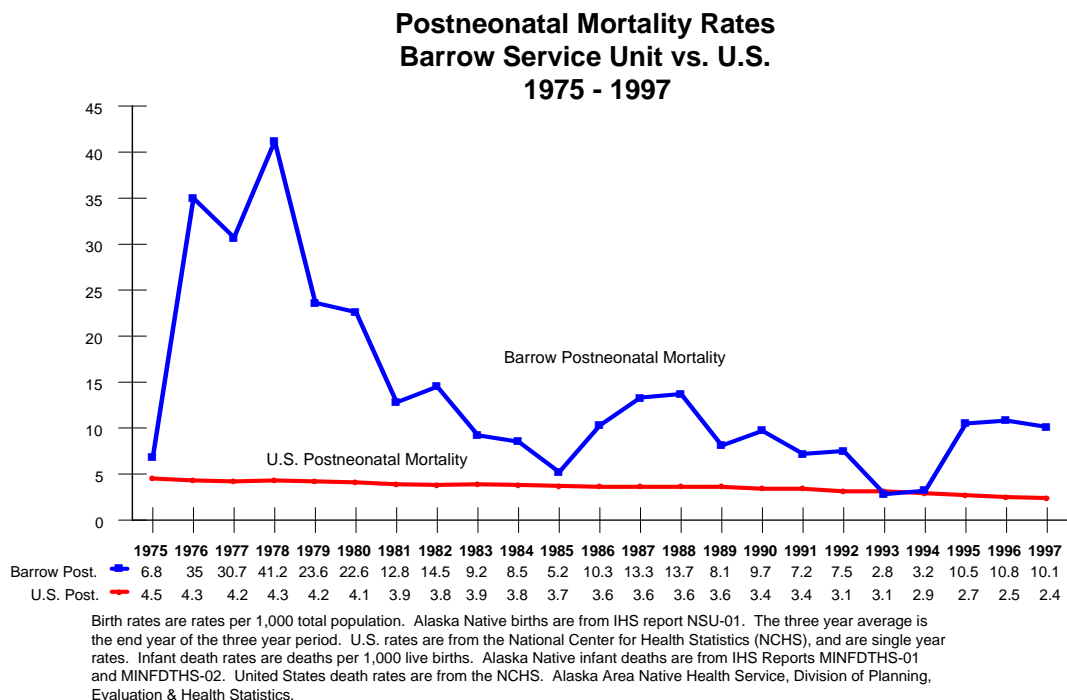
Birth rates are rates per 1,000 total population. Alaska Native births are from IHS report NSU-01. The three year average is the end year of the three year period. U.S. rates are from the National Center for Health Statistics (NCHS), and are single year rates. Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02. United States death rates are from the NCHS. Alaska Area Native Health Service, Division of Planning, Evaluation & Health Statistics.

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Neonatal Mortality. The following graph compares the Barrow Service Unit and U.S. neonatal mortality rates.

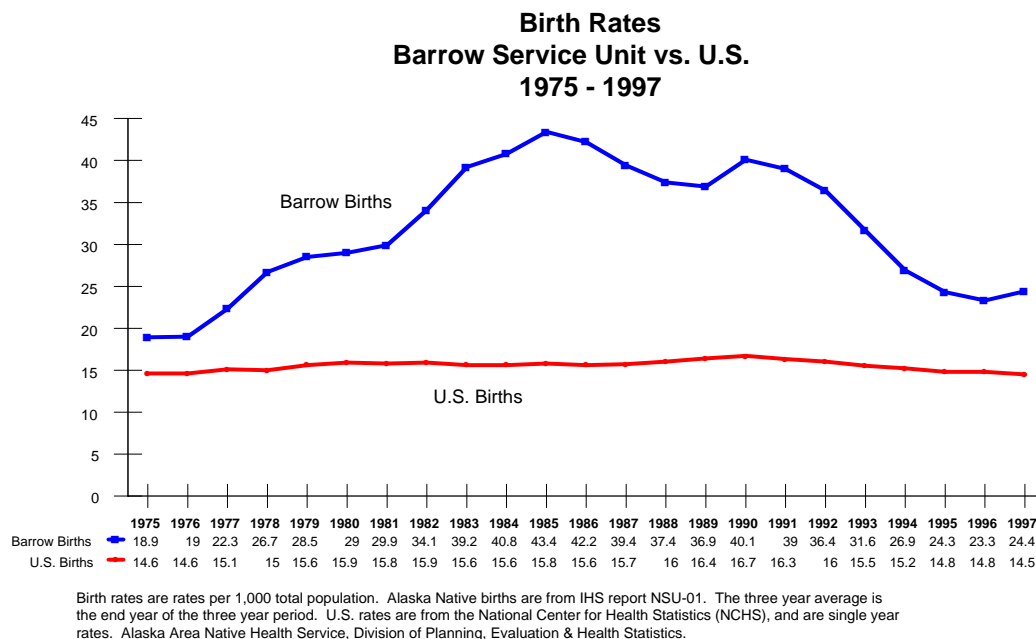


Postneonatal Mortality. The following graph compares the Barrow Service Unit postneonatal mortality rates and the U.S. rates.



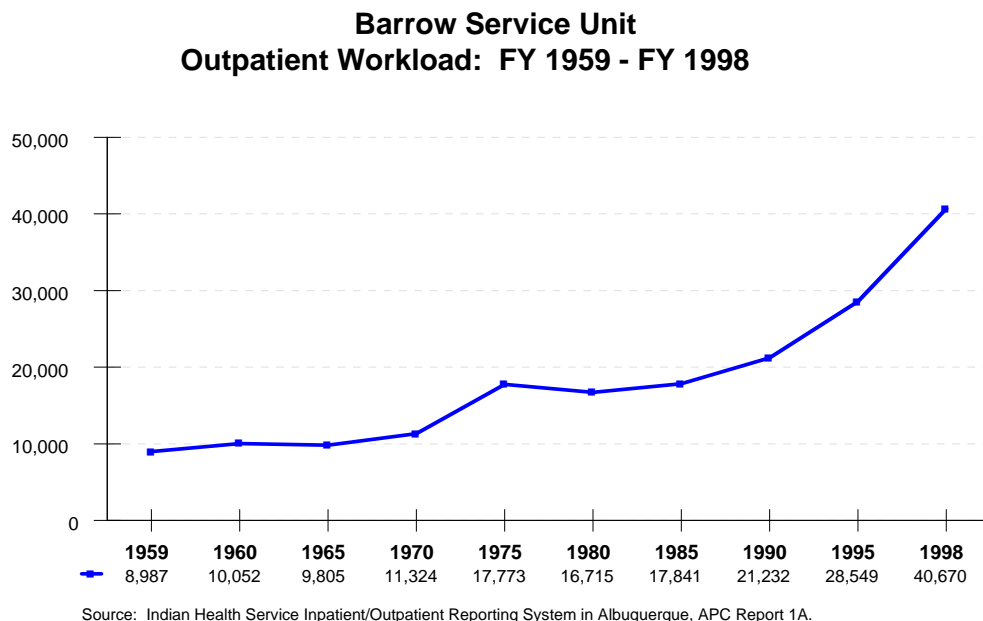
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Births. The births graph shows Barrow rates decreasing and U.S. rates remaining stable in 1997.



OUTPATIENT WORKLOAD/DIAGNOSES

The outpatient workload for Barrow displays a steady increase since 1980.



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Barrow Service Unit Leading Causes of Outpatient Visits: FY 1994 - 1997

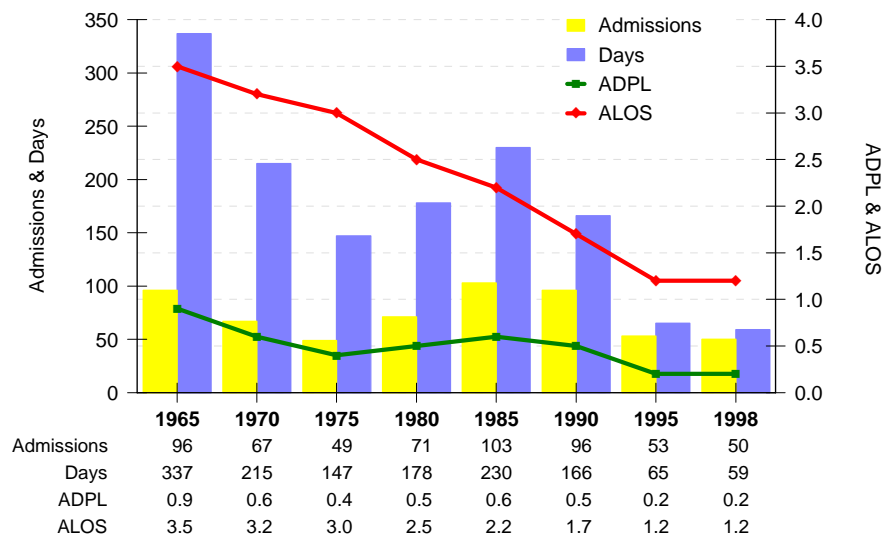
All Age Groups	FY 1994	FY 1995	FY 1996	FY 1997
Upper Respiratory Problems	3,655	4,103	5,588	4,874
Otitis Media	2,591	2,914	3,785	3,420
Accidents & Injuries	2,455	2,403	3,068	2,755
Hospital Med/Surgical Follow-up	1,250	1,244	1,554	1,909
Bone & Joint Disorders	1,057	1,296	1,448	1,644
Prenatal Care	932	1,164	1,199	1,042
Neuroses & Non-Psychotic Disorders	502	585	718	952
Immunization	801	624	981	872
Precordial & Abdominal Pain	530	726	887	864
Tests Only	971	954	1,287	853

Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 1C.

INPATIENT WORKLOAD

The following two graphs display the inpatient workload including and excluding newborns at the Samuel Simmonds Memorial Hospital.

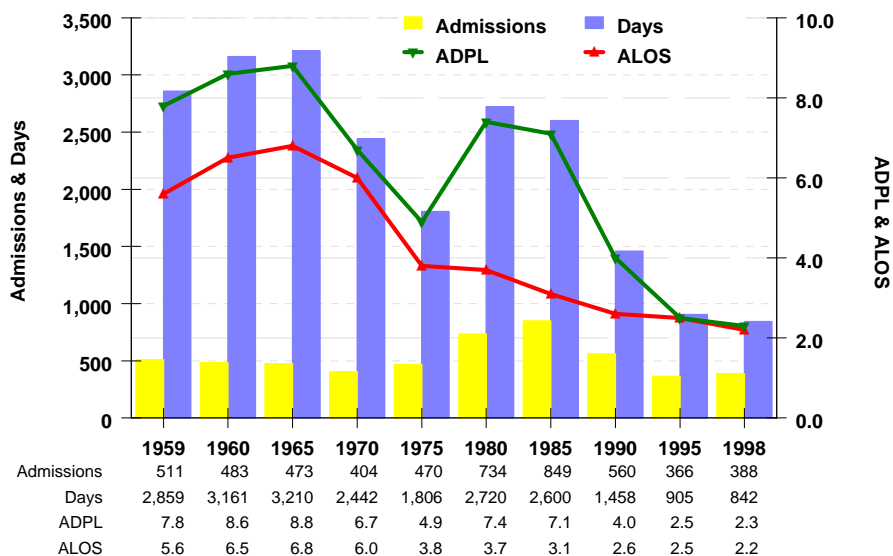
Samuel Simmonds Memorial Hospital(Barrow) Newborn Inpatient Workload: FY 1965 - FY 1998



ADPL = Average Daily Patient Load; ALOS = Average Length of Stay.
Source: HSA-202 Monthly Report of Inpatient Services

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Samuel Simmonds Memorial Hospital (Barrow) Inpatient Workload Excluding Newborns: 1959 - 1998



ADPL=Average Daily Patient Load; ALOS=Average Length of Stay
SOURCE: HSA-202 Monthly Report of Inpatient Services

DISCHARGE DIAGNOSES

Barrow Service Unit Leading Causes of Inpatient Discharges: FY 1994 - FY 1997

	FY 1994	FY 1995	FY 1996	FY 1997
Deliveries (Childbirth)	58	66	78	57
Undiagnosed Symptoms	44	28	55	45
Bronchitis, Emphysema	16	13	34	36
Pneumonia	38	34	55	31
Accidents & Injuries	48	27	35	30
Heart Disease	30	23	26	28
Complications of Pregnancy	8	3	14	15
Abdominal Pain	13	11	19	14
Psychoses	3	6	5	13
Respiratory Allergies	14	6	5	13

Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 2C.